Weekly Summary Report
USEPA Oversight, Sauget Area 1, Sauget, IL
WA No. 239-RSBD-054V / Contract No. 68-W6-0025

Week Ending Friday June 11, 2004

This report summarizes the Remedial Investigation/Feasibility Study (RI/FS) fieldwork conducted by Monsanto, Solutia, and their contractors from June 7, 2004 through June 11, 2004 at Sauget Area 1 Sites. The current RI/FS work consists of a dense non-aqueous phase liquid (DNAPL) Characterization and Remediation Study. CH2M HILL provided field oversight of work throughout the week.

Contractors Onsite

- Golder Associates (consultant for Monsanto/Solutia)
- Groundwater Services Inc. (contractor for Monsanto/Solutia)
- Bird Seismic Services Inc. (siesmic survey fieldwork subcontractor to Resolution Resources Inc., who is subcontracted to Groundwater Services Inc. for the seismic survery and will perform all data evaluation.)

Work Performed This Week

Groundwater Services Inc. (GSI) and Bird Seismic Services Inc. (Bird) were onsite during the week conducting the Geophysical Survey at Sauget Area 1. This phase of work is part of Task 3 of the GSI Work Plan for the DNAPL Characterization and Remediation Study.

Seismic Survey

The three-dimensional seismic reflection survey is being conducted to map the bedrock surface and to identify topographic low points that could potentially enable DNAPL to accumulate.

Field mobilization began on June 7, 2004. Bird tested the survey equipment and set up a small grid of receivers and shock points to test the data collection process under the Sauget Area 1 site topography and conditions. Two potential energy sources were tested: a sledgehammer hitting a metal plate (swung by a member of the crew), and a spring or elastic recoiled, 207-pound, truck-mounted hammer hitting a metal plate. Seismographs were used to evaluate the response and collect the data. Test data was sent to Resolution, and prior to the collection of survey data, feedback was received that the larger truck-mounted hammer provided a more suitable energy source for the survey. Consequently, the sledgehammer method of shocking the ground will only be used during the survey in areas inaccessible by the truck.

Between June 8 and June 10, Bird established the survey grid on the northern and central portions of Site I, on Cerro Copper property. The layout of the survey grid consisted of the following:

- A shock grid was positioned on a 27½-foot grid spacing. Every point in the grid will be 'shocked' – that is, the energy-source (hammer) will be applied at each location on the shock grid when collecting data.
- The receiver grid was positioned on a 55-foot spacing. The receiver grid is the network of geophones (installed into the ground surface) connected by cables running east-west that will be used to listen and detect the response to the shocking of the ground surface with the hammer.
- The survey grid was located using global positioning survey (GPS) technology. Bird installed a base for the GPS work that was conventionally surveyed in relation to a local USGS survey monument. Every 27½-foot spaced row was located with GPS, and at least every 100 feet across the row was located. Accuracy of the GPS survey is anticipated to be within 1 foot.
- Cables were strung east-west across the receiver grid, connecting all the geophones.
- The site was divided into three segments, and a siesmograph was connected to the cable and geophone network in each of the segments. The siesmographs worked simultaneously to collect data.

On June 11, 2004 Bird started to collect data for the seismic survey. The metal plate was placed at each shock point and struck by the hammer 14 times while the geophones and siesmographs recorded the response.

By the end of the week, seismic data had been collected for approximately the northern 350 feet of the survey area. Note that the survey was extended to the northern fenceline of Cerro Copper property, beyond the northern boundary of Site I.

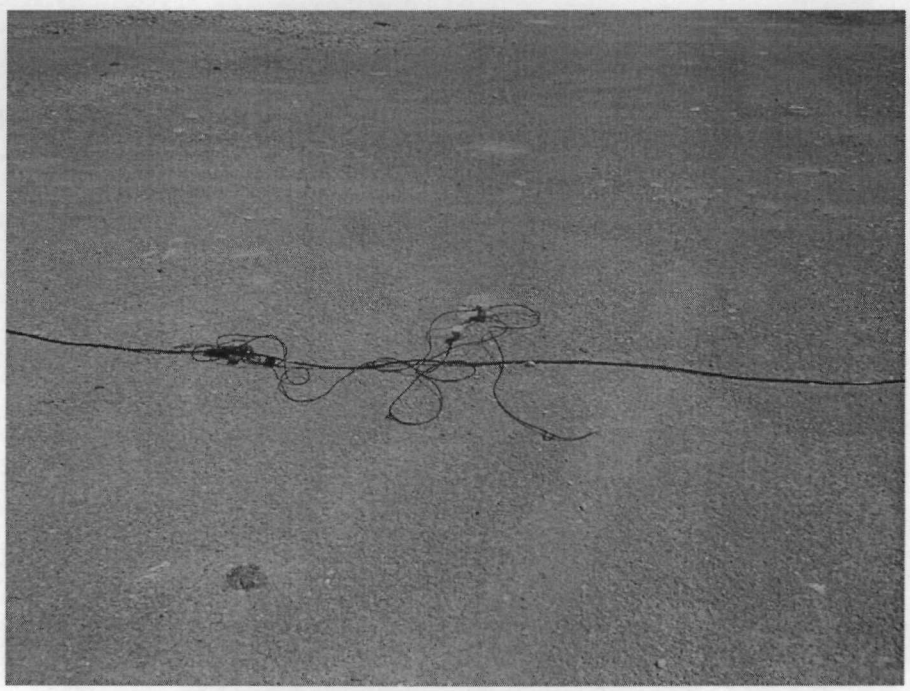
Work Anticipated Next Week

Bird will continue the siesmic survey and collect data at Site I over the weekend of June 12-13 to accommodate Cerro Copper access issues. The smaller, southern section of Site I on Cerro property is scheduled to be surveyed the following weekend. The siesmic survey will continue during the week of June 14-18, south of Queeny Avenue at Sites G, H, and I.

Following the collection of all data from the siesmic survey, the data package will be sent to Resolution for processing and evaluation.

Photos from June 7, through June 11, 2004:

The truck-mounted elastic-recoiled hammer exerts force onto a metal plate to serve as the energy source during the siesmic survey (June 11, 2004).



The geophones or receivers were installed across the survey area in a 55-foot grid spacing (June 11, 2004).

Three seismographs were simultaneously used to collect data across the survey area (June 11, 2004).

English, Chris/STL

From: Morris, Clair/STL
Sent: June 14, 2004 3:22 PM
To: Nabil Fayoumi (Fayoumi.Nabil@epamail.epa.gov); 'Sandra.Bron@epa.state.il.us'
Cc: English, Chris/STL; Haberl, Jeffrey/STL; Richard Williams
Subject: Weekly Field Oversight Report for Sauget Area 1

Nabil and Sandy,

Please see the attached summary report for the Geophysical Survey work conducted at Sauget Area 1 for the week ending June 11th. Please let me know if you have any questions,

Thanks,
Clair.

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